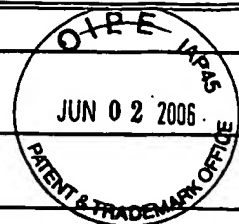


INFORMATION DISCLOSURE STATEMENT

FORM PTO 1449 (modified)

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICELIST OF REFERENCES CITED BY APPLICANT(S)
(Use several sheets if necessary.)

Date Submitted to PTO: June 2, 2006

ATTY DOCKET NO.
2000_1420SERIAL NO.
09/686,467APPLICANT
Mitsuaki OSHIMA et al.FILING DATE
October 12, 2000GROUP
2634 ~~2634~~ 2611

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
/DH/	AA	4,003,002	1-11-77	Snijders et al.			
/DH/	AB	4,053,713	10-11-77	Nitadori			
	AC						
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FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
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OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)

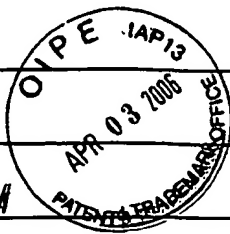
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DATE CONSIDERED

03/06/2007

Sheet 1 of 1		INFORMATION DISCLOSURE STATEMENT					
FORM PTO 1449 (modified) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE LIST OF REFERENCES CITED BY APPLICANT(S) <i>(Use several sheets if necessary)</i> Date Submitted to PTO: April 3, 2006			ATTY DOCKET NO. 2000_1420		SERIAL NO. 09/686,467		
			APPLICANT Mitsuaki OSHIMA et al.				
			FILING DATE October 12, 2000				
U.S. PATENT DOCUMENTS							
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
/DH/	AA	4,267,592	5-12-81	Craiglow			
/DH/	AB	4,601,045	7-15-86	Lubarsky			
/DH/	AC	4,912,706	3-27-90	Eisenberg et al.			
/DH/	AD	4,914,655	4-3-90	Johannes et al.			
/DH/	AE	5,018,198	5-21-91	Takahashi			
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FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
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OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)							
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EXAMINER				DATE CONSIDERED			
/Dac Ha/				03/06/2007			

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include cop. this form with next communication to applicant.

Sheet 1 of 1		INFORMATION DISCLOSURE STATEMENT					
FORM PTO 1449 (modified) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE LIST OF REFERENCES CITED BY APPLICANT(S) (Use several sheets if necessary) Date Submitted to PTO: April 11, 2005			ATTY DOCKET NO. 2000_1420		SERIAL NO. 09/686,467		
			APPLICANT Mitsuaki OSHIMA et al.				
			FILING DATE October 12, 2000		GROUP 2634 211		
U.S. PATENT DOCUMENTS							
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA						
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		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
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OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)							
DH	AO	J. A. C. Bingham, "Multicarrier Modulation for Data Transmission: An Idea Whose Time Has Come", IEEE Communications Magazine, Vol. 28, May 1990, pages 5-8 and 11-14					
DH	AP	B. Hirosaki, "An Orthogonally Multiplexed QAM System Using the Discrete Fourier Transform", IEEE Transactions on Communications, Vol. Com-29, No. 7, July 1981, pages 982-989					
DH	AQ	L. J. Cimini, Jr., "Analysis and Simulation of a Digital Mobile Channel Using Orthogonal Frequency Division Multiplexing", IEEE Transactions on Communications, Vol. Com-33, No. 7, July 1985, pages 665-675 and Annex					
EXAMINER 			DATE CONSIDERED 06/07/05				

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include cop. this form with next communication to applicant.

Sheet 1 of 2		INFORMATION DISCLOSURE STATEMENT						
FORM PTO 1449 (modified) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY DOCKET NO. 2000_1420		SERIAL NO. 09/686,467				
LIST OF REFERENCES CITED BY APPLICANT(S) (Use several sheets if necessary)		APPLICANT Mitsuki OSHIMA et al.				FILING DATE October 12, 2000		
Date Submitted to PTO: March 23, 2005		GROUP 2694 2611						
U.S. PATENT DOCUMENTS								
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
D4	AA	3,824,548	7-16-74	Sullivan et al.	—	—	—	
	AB	3,959,726	5-25-76	Hinoshita et al.	—	—	—	
	AC	4,303,939	12-1-81	Stephens et al.	—	—	—	
	AD	4,303,941	12-1-81	Marti et al.	—	—	—	
	AE	4,309,726	1-5-82	Tanaka et al.	—	—	—	
	AE	4,535,352	8-85	Haskell	—	—	—	
	AG	4,564,858	1-14-86	Resch	—	—	—	
	AH	4,581,639	4-8-86	Judge	—	—	—	
	AI	4,769,819	9-6-88	Matsutani et al.	—	—	—	
	AJ	4,794,447	12-27-88	Tsinberg	—	—	—	
	AK	4,817,192	3-28-89	Phillips et al.	—	—	—	
	AL	5,029,003	7-91	Jonnalagadda	—	—	—	
	AM	5,134,464	7-28-92	Basile et al.	—	—	—	
	AN	5,400,084	3-21-95	Scarpa	—	—	—	
	D4	AO	5,214,656	5-25-93	Chung et al.	—	—	—
	FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO	
D4	AP	3-48587	3-1-91	Japan			abstract	
OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)								
D4	AQ	Masafumi SAITO et al., "Bit Error Rate Characteristics of OFDM in Multipath Environment", 1991						
D4	AR	Ryutaro OHMOTO et al., "π/4-shift QPSK Subcarrier Transmission", 1991						
EXAMINER				DATE CONSIDERED 06/07/05				

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include cop. this form with next communication to applicant.

INFORMATION DISCLOSURE STATEMENT

FORM PTO 1449 (modified)

ATTY DOCKET NO.
2000_1420SERIAL NO.
09/686,467U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICELIST OF REFERENCES CITED BY APPLICANT(S)
(Use several sheets if necessary)APPLICANT
Mitsuaki OSHIMA et al.

Date Submitted to PTO: March 23, 2005

FILING DATE
October 12, 2000GROUP
~~2634~~ 2611

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
DA	AA	5,181,112	1-19-93	Citta et al.	—	—	—
	AB	5,377,051	12-27-94	Lane et al.	—	—	—
	AC	5,576,902	11-19-96	Lane et al.	—	—	—
	AD	5,218,622	6-8-93	Fazel et al.	—	—	—
	AE	5,561,468	10-1-96	Bryan et al.	—	—	—
	AF	5,598,220	1-97	Citta et al.	—	—	—
	AG	5,802,241	9-1-98	Oshima	—	—	—
	AH	4,800,426	1-24-89	Glenn	—	—	—
DA	AI	5,007,088	4-9-91	Ooi et al.	—	—	—

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
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OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)

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EXAMINER

DATE CONSIDERED

FORM PTO 1449 (modified)

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICELIST OF REFERENCES CITED BY APPLICANT(S)
(Use several sheets if necessary)

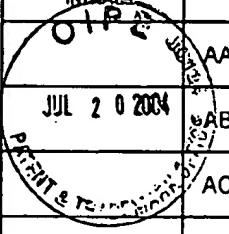
Date Submitted to PTO: July 20, 2004

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2000_1420SERIAL NO.
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Mitsuaki OSHIMA et al.FILING DATE
October 12, 2000

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U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
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FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
DA	AJ	2-154583	6-13-90	Japan			abstract
	AK						
	AL						
	AM						
	AN						

OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)

DA	AO	Shigeki MORIYAMA et al., "Delay Propagation Characteristics at VHF and UHF bands in Urban Area", 1991 Spring National Convention Record, The Institute of Electronics, Information and Communication Engineers, Part 2, p. 406, March 15, 1991
DA	AP	Yasuhiro ITO et al., "Adaptive Weighted Code Division Multiplexing (AW-CDM) Transmission System for Terrestrial Digital Television Broadcasting", ITE Technical Report Vol. 17, No. 13, pp 27-32, February 25, 1993
	AQ	

EXAMINER

DATE CONSIDERED

06/07/05

FORM PTO 1449 (modified)

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICELIST OF REFERENCES CITED BY APPLICANT(S)
(Use several sheets if necessary)

Date Submitted to PTO: January 30, 2004

ATTY DOCKET NO.
2000_1420SERIAL NO.
09/686,467APPLICANT
Mitsuaki OSHIMA et al.FILING DATE
October 12, 2000GROUP
2634 2611

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
DIPE	AA	5,128,758	7-7-92	Azadegan et al.	—	—	—
AN 3 0 2004	AB	5,038,402	8-6-91	Robbins	—	—	—
	AC	5,638,112	6-10-97	Bestler et al.	—	—	—
	AD	5,063,445	11-5-91	Nishizawa et al.	—	—	—
	AE	5,819,000	10-6-98	Oshima	—	—	—
	AF	5,999,569	12-7-99	Oshima	—	—	—
	AG	5,892,879	4-6-99	Oshima	—	—	—
	AH	6,049,651	4-11-00	Oshima	—	—	—
DH	AI	6,256,357	7-3-01	Oshima	—	—	—

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FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
DH	AJ	3-69295	3-25-91	Japan	—	—	X
	AK	2-260726	10-23-90	Japan	—	—	X
	AL	58-161427	9-26-83	Japan	—	—	abstract
	AM	57-39629	3-4-82	Japan	—	—	abstract
DH	AN	58-161547	9-26-83	Japan	—	—	abstract

OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)

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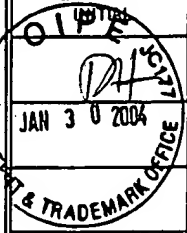
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U.S. DEPARTMENT OF COMMERCE
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Date Submitted to PTO: January 30, 2004

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09/686,467APPLICANT
Mitsuaki OSHIMA et al.FILING DATE
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~~2634~~ 2611

U.S. PATENT DOCUMENTS



*EXAMINER INITIALS		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA	5,170,413	12-8-92	Hess et al.			
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FOREIGN PATENT DOCUMENTS

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	AH	63-180222	7-25-88	Japan	_____	_____	abstract	
	AI	2-94814	4-5-90	Japan	_____	_____	abstract	
	AJL	61-70861	4-11-86	Japan	_____	_____	abstract	
	AK	2-218279	8-30-90	Japan	_____	_____	abstract	
	AL	2,095,435	5-10-92	Canada	_____	_____	X	
	AM	91/20137	12-26-91	WO	_____	_____	X	
	AN	92/22162	12-10-92	WO	_____	_____	X	

OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)

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